

201956

**Haynes, Bill**

From: James McCullough [James.McCullough@dep.state.nj.us]
Sent: Thursday, June 11, 2009 10:18 AM
To: Eng.Jeanette@epamail.epa.gov
Cc: Haynes, Bill; Patricia Gardner; donofrio.cris@epa.gov; perera.dishad@epa.gov
Subject: Abandoned Ra-226 devices (Alnor Dewpointers) in NJ
Attachments: an_a_AlnorDewpointer_manual.pdf

Ms. Eng,

I am an inspector with the NJDEP Radioactive Materials Section. I am writing to you to inform you of an on-going radioactive materials investigation and request assistance disposing of two sources that have been discovered. A summary of my investigation follows.

On June 8, 2009 the NJDEP Radioactive Materials Section (RMS) was notified by Gerdau Ameristeel, a scrap metal recycling facility, that a device had been found while loading a rail car with scrap metals. The device is a generally licensed Alnor Dewpointer device, model 7000U, serial number 2727 containing about 7 micro curies of Radium-226. Maximum reading on-contact with the device was 4 mR/hr. The source was isolated in an on-site storage location. The operation manual is attached for reference. Contact with the device distributor (now DICKEY-John Corporation of Illinois) identified that this device had been distributed to Alfred Heller Heat Treating Co., New York, NY in 1956. This company moved to Clifton, NJ in 1962.

On June 10, 2009 RMS staff investigated the device at Gerdau Ameristeel. The inspector discovered that the source consists only of the instrument panel. The box that would have encased this panel was not found. The source is still believed to be contained within the device. A crude leak test did not indicate any leakage. This source is being stored at Gerdau Ameristeel, North Crossman Road, Sayreville, NJ 08871. Contact at this site is Mark Blaire, Environmental Manager, who can be reached at (908) 208-2829.

The inspector then traveled to Alfred Heller Heat Treating Co. located at 5 Wellington St., Clifton, NJ 07011 where it was discovered that the company had gone out of business in January 2009 and was currently being liquidated. U.S. EPA is currently on-scene in a sort-of unofficial capacity cleaning up the hazardous materials on-site. On-Scene Coordinator Cris D'Onofrio was not present, however, the inspector met with EPA Assistant On-Scene Coordinator Dilshad Perera and Senior Site Supervisor Bill Haynes (EPA contractor) of AECOM. Discussions indicated that the device that was found at Gerdau Ameristeel may have been taken from the site under a number of legal and illegal circumstances. It was noted that some vandalism and scrap metals scavenging had occurred at this site. A walk-through of the site uncovered another Alnor Dewpointer, Model 7000 U serial number 15664. Mr. Perera agreed to secure this device on-site until they can arrange for disposal. He also indicated that EPA may be able to handle disposition of the device that had been found at Gerdau Ameristeel, since it was evident that it came from the Alfred Heller site.

Discussions with the device distributor indicate that they are willing to take possession of the devices if they can be shipped to them. The attached operations manual includes instructions for shipping intact and damaged devices. The devices can be shipped to DICKEY-john Corporation, Dock 2 Dewpointer, 5200 DICKEY-john Road, Auburn, IL 62615 USA. Contacts at this company are Mike Weidler at (217) 438-2334 or Mark Barber at (800) 637-2952. They should be contacted prior to shipping the

6/11/2009

materials so that they know to expect a shipment relating to this incident. Mr. Weidler indicated that his company sometimes waives a disposal charge when devices are found abandoned.

Please let me know if EPA can assist in shipping these devices back to the manufacturer. If you have any questions, feel free to contact me. Thank you.

James

NJEMS Incident ID# C314681

James T. McCullough, Senior Environmental Specialist
New Jersey Department of Environmental Protection
Bureau of Environmental Radiation
Radioactive Materials Section
P.O. Box 415
Trenton, NJ 08625
voice: (609) 984-5480
fax: (609) 633-2210
24-Hour Emergency: 1-877-WARN-DEP

6/11/2009



Figure 5
Type 7000



3. When making the last trial near the end point, wait at least 60 seconds for the sample of gas to cool after it has been pumped up to the desired pressure ratio. Then press down on the handle of the operating valve. With some experience, an operator will find that he can determine the end point very easily if he begins with pressure ratios that are too small and uses the density of the fog on any trial as a guide to the selection of his next trial pressure ratio. When two critical pressures as described above are determined, take the numerical average and call that the true end point.
4. Having determined the end point, read the temperature on the thermometer and look up the Q value of the gas being tested. With these numbers, use the Dewpointer Calculator to compute the dew point temperature as described in the CALCULATOR section. Experience has shown that about three independent determinations should be made just to prove that the system has been properly purged and that the dew point temperature is not drifting downward due to the further drying of the connecting hose or tubing and the inside of the Dewpointer.
5. When measuring the dew point of very dry, clean gas such as compressed, bottled gas, allow at least 60 seconds for the ions to form in the gas compressed into the fog chamber before pressing on the operating valve. When very little moisture is within the gas and very little radioactive material is inside the fog chamber, it takes time for the generation of enough ions to fill the chamber and thereby permit the

Haynes, Bill

From: James McCullough [James.McCullough@dep.state.nj.us]
Sent: Thursday, June 11, 2009 12:37 PM
To: Eng.Jeanette@epamail.epa.gov
Cc: Haynes, Bill; Patricia Gardner; donofrio.cris@epa.gov; perera.dilshad@epa.gov
Subject: Re: Abandoned Ra-226 devices (Alnor Dewpointers) in NJ

Jeanette,

EPA's assistance is greatly appreciated. I believe we would just like to be updated when the devices are shipped to the distributor so that I can close out our incident file. Thanks.

James

>>> <Eng.Jeanette@epamail.epa.gov> 06/11/09 12:15 PM >>>

Jim:

Thanks for the info. I was at Gerdau a couple years ago on a multimedia inspection so took particular interest in your summary. It is fortuitous that there is a cooperative device distributor and the devices appear to have come from a site the OSCs are working on already.

I just spoke with Dilshad and it seems all the pieces are already in place to handle this smoothly. But if you need anything in particular from me just shout out and I'll coordinate with the OSC on this end.

"James
 McCullough"
 <James.McCullough@dep.state.nj.us>
 s>
 To
 Jeanette Eng/R2/USEPA/US@EPA
 cc
 <bill.haynes@aecom.com>,
 06/11/2009 10:18 AM
 "Patricia Gardner"
 <Patricia.Gardner@dep.state.nj.us>
 >, Cris DOnofrio/R2/USEPA/US@EPA,
 <perera.dilshad@epa.gov>
 Subject
 Abandoned Ra-226 devices (Alnor
 Dewpointers) in NJ

6/18/2009

Ms. Eng,

I am an inspector with the NJDEP Radioactive Materials Section. I am writing to you to inform you of an on-going radioactive materials investigation and request assistance disposing of two sources that have been discovered. A summary of my investigation follows.

On June 8, 2009 the NJDEP Radioactive Materials Section (RMS) was notified by Gerdau Ameristeel, a scrap metal recycling facility, that a device had been found while loading a rail car with scrap metals. The device is a generally licensed Alnor Dewpointer device, model 7000U, serial number 2727 containing about 7 micro curies of Radium-226. Maximum reading on-contact with the device was 4 mR/hr. The source was isolated in an on-site storage location. The operation manual is attached for reference. Contact with the device distributor (now DICKY-John Corporation of Illinois) identified that this device had been distributed to Alfred Heller Heat Treating Co., New York, NY in 1956. This company moved to Clifton, NJ in 1962.

On June 10, 2009 RMS staff investigated the device at Gerdau Ameristeel. The inspector discovered that the source consists only of the instrument panel. The box that would have encased this panel was not found. The source is still believed to be contained within the device. A crude leak test did not indicate any leakage. This source is being stored at Gerdau Ameristeel, North Crossman Road, Sayreville, NJ 08871. Contact at this site is Mark Blaire, Environmental Manager, who can be reached at (908) 208-2829.

The inspector then traveled to Alfred Heller Heat Treating Co. located at 5 Wellington St., Clifton, NJ 07011 where it was discovered that the company had gone out of business in January 2009 and was currently being liquidated. U.S. EPA is currently on-scene in a sort-of unofficial capacity cleaning up the hazardous materials on-site. On-Scene Coordinator Cris D'Onofrio was not present, however, the inspector met with EPA Assistant On-Scene Coordinator Dilshad Perera and Senior Site Supervisor Bill Haynes (EPA contractor) of AECOM. Discussions indicated that the device that was found at Gerdau Ameristeel may have been taken from the site under a number of legal and illegal circumstances. It was noted that some vandalism and scrap metals scavenging had occurred at this site. A walk-through of the site uncovered another Alnor Dewpointer, Model 7000 U serial number 15664. Mr. Perera agreed to secure this device on-site until they can arrange for disposal. He also indicated that EPA may be able to handle disposition of the device that had been found at Gerdau Ameristeel, since it was evident that it came from the Alfred Heller site.

Discussions with the device distributor indicate that they are willing

6/18/2009

to take possession of the devices if they can be shipped to them. The attached operations manual includes instructions for shipping intact and damaged devices. The devices can be shipped to DICKY-john Corporation, Dock 2 Dewpointer, 5200 DICKY-john Road, Auburn, IL 62615 USA. Contacts at this company are Mike Weidler at (217) 438-2334 or Mark Barber at (800) 637-2952. They should be contacted prior to shipping the materials so that they know to expect a shipment relating to this incident. Mr. Weidler indicated that his company sometimes waives a disposal charge when devices are found abandoned.

Please let me know if EPA can assist in shipping these devices back to the manufacturer. If you have any questions, feel free to contact me. Thank you.

James

NJEMS Incident ID# C314681

James T. McCullough, Senior Environmental Specialist
New Jersey Department of Environmental Protection
Bureau of Environmental Radiation
Radioactive Materials Section
P.O. Box 415
Trenton, NJ 08625
voice: (609) 984-5480
fax: (609) 633-2210
24-Hour Emergency: 1-877-WARN-DEP[attachment
"an_a_AlnorDewpointer_manual.pdf" deleted by Jeanette Eng/R2/USEPA/US]

6/18/2009



JAMES McCULLOUGH

Radioactive Materials Section

STATE OF NEW JERSEY

PO BOX 415

DEPT. OF ENVIRONMENTAL PROTECTION TRENTON, NJ 08625-0415

BUREAU OF ENVIRONMENTAL RADIATION TEL: (609) 984-5462

E-MAIL: james.mccullough@dep.state.nj.us FAX: (609) 633-2210

Website: www.nj.gov/dep/rpp



CROWNE PLAZA®

HOUSTON SUITES

THE PLACE TO MEET.

Mike Weidler

Drakey-John (source info/dist.)

217-438-2334

Mark Blaire

Gerdau Ameristeel (scrap facility)

908-208-2829

Source ID: Ra-226

Alnor Dewpointer

Type #7000 U

serial # 2727

according to NRC SSDR ~ 7µCi Ra-226

4 mB/hr on contact

shipped to Alfred Heller in 1956